Connectors

USB-C

ESP32 WIFI

Keyboard

Main CPU

I2C BUS

CH340G

EEPROM

STM LED

WM8960

Power Regulator

BATT CHIP

Serial Switch Relay

I2C Addresses

EEPROM:
- EEP_SCL(6)
- EEP_SDA(5)

WM8960:
- WM_SDA(18)
- WM_CLK(17)

ESP32:
- ESP_SDA(24)
- ESP_SCL(25)

STM32:
- PB6(58) STM_SCL
- PB7(59) STM_SDA

I2S Bus STM32:
- I2S2_ext_SD(10) --> BCLK
- I2S2_SD(11) --> DACLRC
- I2S3_SD(53) --> ADCDAT
- I2S3_ext_SD(52) --> ADCLRC
- I2S3_CK(51) --> DACDAT

Power Usage

Serial Lines

CH340N:
- CH_RXD(7) SWITCH RELAY
- CH_TXD(8) SWITCH RELAY

STM32:
- UART1_TX(37) CONNECTED TO ESP
- UART1_RX(38) CONNECTED TO ESP
- UART2_TX(16) SWITCH RELAY
- UART2_RX(17) SWITCH RELAY
- UART3_TX(29) SERIAL DEBUG CONNECTOR
- UART3_RX(30) SERIAL DEBUG CONNECTOR

ESP32:
- UART1_TX(10) CONNECTED TO STM
- UART1_RX(11) CONNECTED TO STM
- ESP_RXD0(36) SWITCH RELAY
- ESP_TXD0(37) SWITCH RELAY

Notes

- 220u capacitor on display
- Unsure about voltage resistor split

CISCO SYSTEMS
Sheet: /
File: EV3 Schematic.kicad_sch
Title: EV2 – FINN BERG
Size: A2   Date: 2023-02-17   Rev:
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